

Title (en)

Apparatus and method for detecting blood flow signal free from motion artifact and stress test apparatus using the same

Title (de)

VORRICHTUNG UND VERFAHREN ZUR ERFASSUNG EINES BLUTFLUSSSIGNALS FREI VON BEWEGUNGSARTEFAKTEN UND STRESSTESTVORRICHTUNG WELCHER DIESE VERWENDET

Title (fr)

DISPOSITIF ET PROCEDE POUR LA DETECTION D'UN SIGNAL D'ECOULEMENT SANGUIN SANS ARTEFACT DE MOVEMENT ET DISPOSITIF DE TEST DU STRESS UTILISANT LE MEME

Publication

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Application

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Priority

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Abstract (en)

An apparatus and method to detect a blood flow signal free from a motion artifact, and a stress test apparatus using the same, enhance data reliability of the blood flow signal by removing the motion artifact from the blood flow signal detected by photo-plethysmography. The apparatus to detect the blood flow signal includes a base pattern correlation coefficient calculating unit to determine peak points in the blood flow signal sensed from a body of an examinee using a blood flow sensing unit, and to calculate correlation coefficients of each peak point using a predetermined base pattern, and a motion artifact processing unit to determine the motion artifact using the calculated correlation coefficients and to remove the motion artifact from the blood flow signal. Thus, reliability of the blood flow signal is enhanced by effectively removing the motion artifact from the blood flow signal detected by the photo-plethysmography. <IMAGE>

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Citation (applicant)

US 5662106 A 19970902 - SWEDLOW DAVID B [US], et al

Cited by

ES2276594A1; CN103340621A; DE102012112689A1; EP2914171A4; WO2017178592A1; WO2006134197A1

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